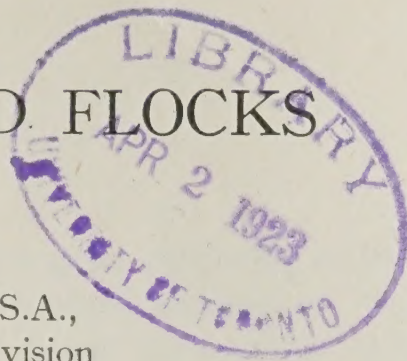


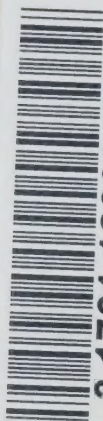
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MANITOBA APPROVED FLOCKS



By A. C. McCULLOCH, B.S.A.,
Live Stock Branch, Poultry Division




DOMINION OF CANADA
DEPARTMENT OF AGRICULTURE
PAMPHLET No. 25—NEW SERIES

THE LIVE STOCK BRANCH

H. S. ARKELL, Commissioner

Published by direction of the Hon. W. R. Motherwell, Minister of Agriculture,
Ottawa, 1923



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FOREWORD

RURAL Manitoba has for many years been a heavy grain-producing section and relatively little attention has been directed to stock production. But farmers are beginning to realize that such a condition cannot permanently exist and the trend of the times is decidedly towards a more diversified farming practice. Live stock becomes a practical necessity in the maintenance of soil fertility and productivity. It is a means for the transforming of roughage into necessary articles of human food. It frequently serves as a safety factor in cases of excessive grain production and consequent low prices and as well requires the production of different crops, thus obviating the dangers consequent to extreme specialization.

Poultry raising is usually considered, and perhaps rightly so, a side line in general farming practice.

It is a branch of work which can be successfully carried on by any one with average intelligence and aptitude for farm work.

It provides a source of revenue for every month of the year.

Eggs are a most essential article of our human dietary as disclosed by recent scientific investigation. This insures an ever-increasing demand.

The per capita consumption of eggs is steadily and rapidly increasing.

A large and expensive portion of the poultry ration, especially in summer, may be obtained at no expense to the keeper.

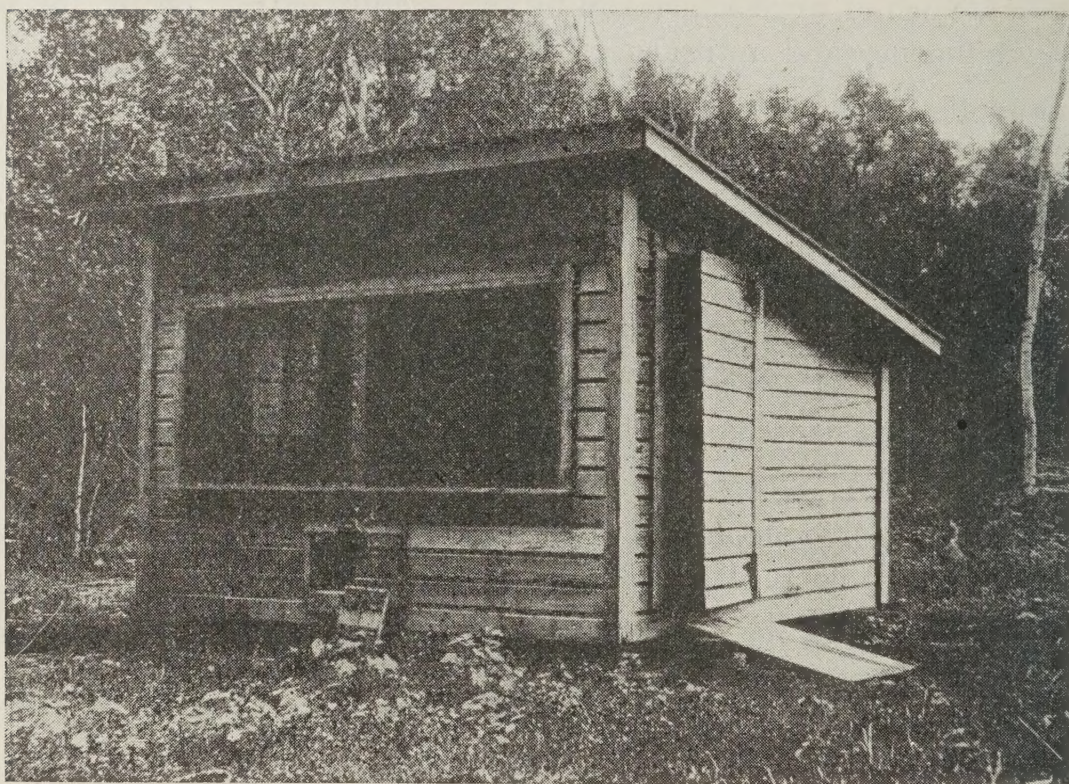
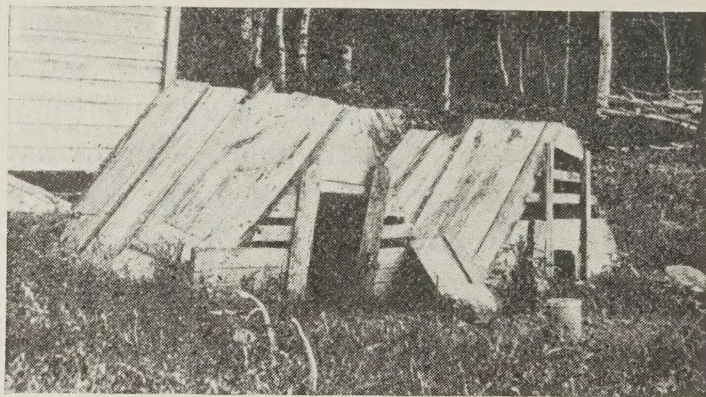
It is a business equally as well and easily handled by farm women as by men.

No branch of live stock will return greater profit on food consumed than a properly handled flock of high-laying birds.

Poultry raising is an essential branch of any well organized system of diversified farming.

INFERIORITY OF MONGREL STOCK

Opinion prevails in many rural districts that mongrel fowl are better layers than pure-bred and unfortunately in too many cases this is true. Consequently common practice rules that male birds of a different variety should be used each year. The result invariably is a flock cosmopolitan in colour, size, shape, production, maturity, colour of egg, colour of flesh and in every other respect. Such is not a thing of beauty, is not pleasing to the eye, and therefore does not appeal to the owner nor command his interest nor his best and closest attention. It lacks the first essential of a profitable flock.

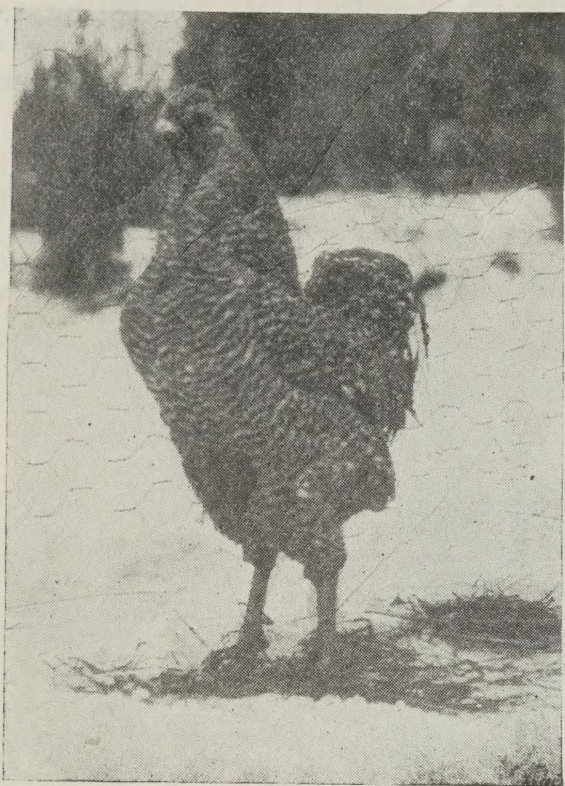


Many Approved Flock owners who used A-shaped coops or other kinds now use Colony Houses. They provide much more room and fresh air for growing stock. This house is 8 ft. wide, 6 feet deep, 6 feet high in front, 4 feet high in rear and is built on skids.

It can scarcely be denied that the mongrelizing practice usually maintains and frequently increases the hardiness and vigour of a flock. An improvement in the vigour of the offspring is likewise a common result of the crossing of two breeds or varieties, even though both are relatively low in vigour. The use of males of a different variety each season is the practical equivalent of a first cross and should produce similar results. But on this point alone, the only conceivable virtue of mongrelization, the practice cannot be endorsed, for crossing of different strains of one variety often has the same effect as crossing different breeds and varieties. Pure-bred fowl may be bred with vigour equal to that of any mongrel flock, and many varieties are, else the remarkable performance in egg production obtained in recent times, almost without exception from pure-bred birds, would never have been possible.

Importance of Specialization in Varieties

There are about one hundred and twenty standard varieties of poultry recognized in Canada, exclusive of ducks, geese and turkeys. Of these many are bred for ornamental purposes only and many others though bred more or less extensively are unsuited to Manitoba conditions and requirements. The result is a great lack of uniformity and a lack of quality in our market poultry as well as in the egg production of the laying stock. This mongrelization of the industry, in the broader sense, is equivalent to mongrelization of the flock in the more restricted sense. The same disease exists, similar results must be expected and the same antidote is required.



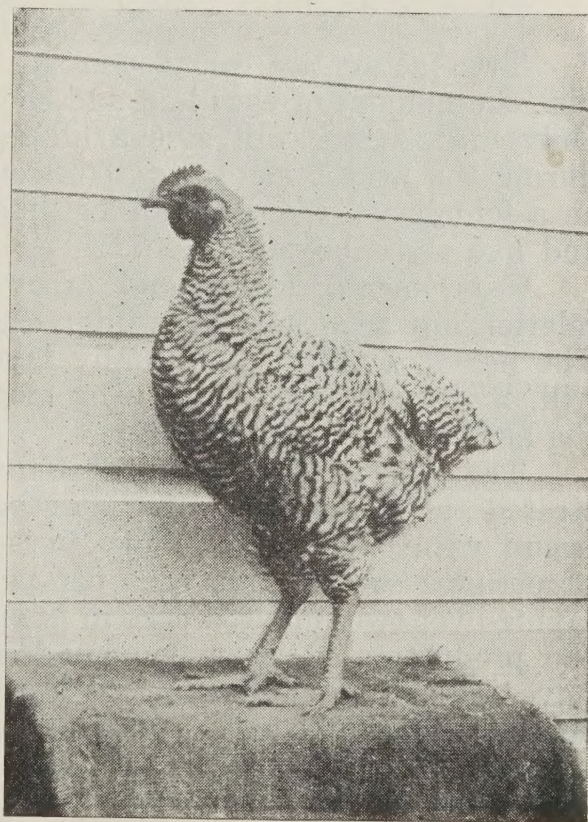
Son of a 261-egg hen. Sire of many males at the head of Manitoba Approved Flocks.

That uniformity is a valuable selling factor is everywhere recognized. It naturally follows that if farmers or poultry raisers in a certain district (whether town, municipality or province—the larger the area the better) will all produce the same variety, there will not only be keen healthy competition between them but the quality will improve and the demand for the output will increase. High quality and large scale production invariably attract custom.

Increasing Egg Production

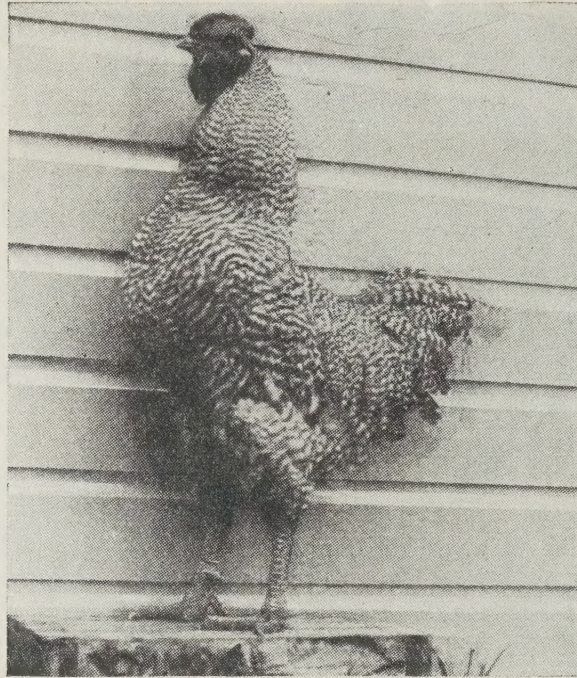
It is frequently thought that the very fine colour markings of poultry bred specially for colour is natural to the variety and that birds with very inferior markings are not pure-bred. This may be entirely erroneous. Practically all of our present varieties were once of very inferior colour with great variation between individual birds and only by very intense scientific and long continued breeding has the present excellence of colour been attained. This excellence of colour is not natural. It is purely artificial. It is built up through the general processes of elimination of the inferior as revealed by the natural laws of heredity and variation.

The egg production of the ancestors of our domestic fowl was extremely meagre, perhaps two dozen eggs per year. These were laid in the natural breeding season and were not sufficient to make the raising of poultry economically attractive. It was evident that greater egg production must be secured and the logical season in which to strive for more production was during the



A prospective breeder.

winter months when the price of eggs ruled high. It must therefore be conceded that high winter egg production is a purely artificial character, or degree of a character, in the same sense and to the same extent that excellence of colour markings is artificial, and further, that it cannot be secured except by intense scientific and long continued breeding from those individuals possessing the character in high degree, the constitutional vigour and other factors basic to high production, together with the ability to impress these characters upon the progeny.



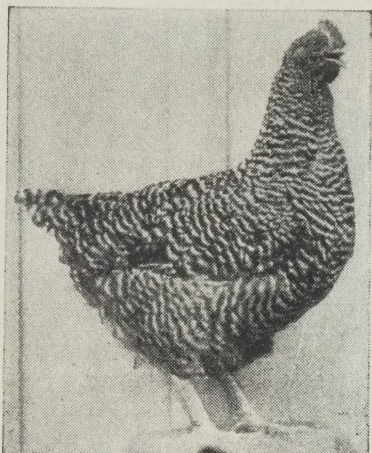
The "Head" of one of the Manitoba Approved Flocks in 1922. An excellent type of bird.

Two factors are conspicuous as affecting the profits from poultry-keeping, viz., the number of eggs laid and the season of the year in which they are laid. Only birds which will give a high annual production with a fair percentage during the winter months will fill our economic requirements and put poultry on a foundation where it can legitimately command the attention of the farmer and live stock breeder.

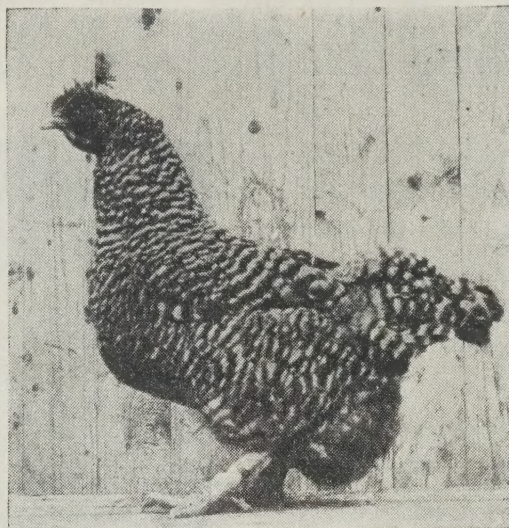
Experiment Station and other reliable records indicate clearly a direct relationship between high winter egg production and late summer production. The heavy winter layer usually lays late into the fall and moults late. She will, moreover, lay as many or more eggs in the natural hatching season as the hen which lays then only.

The poultry Experiment Stations, laying contests, etc., have amply demonstrated the possibilities of winter egg production. Many of the former have begun with flocks of ordinary pure-bred poultry with an average production of perhaps seventy-five eggs per year or a little more, with few or no birds laying over two hundred eggs in twelve months, and by breeding have increased the production between one hundred and two hundred per cent. They now have individuals well over the three hundred egg mark and small flocks of special pedigreed stock averaging over two hundred and fifty eggs per bird.

Twenty-five pens in the egg laying contests conducted on the Dominion Experimental Farms during 1920-21, laid over four dozen eggs per bird between



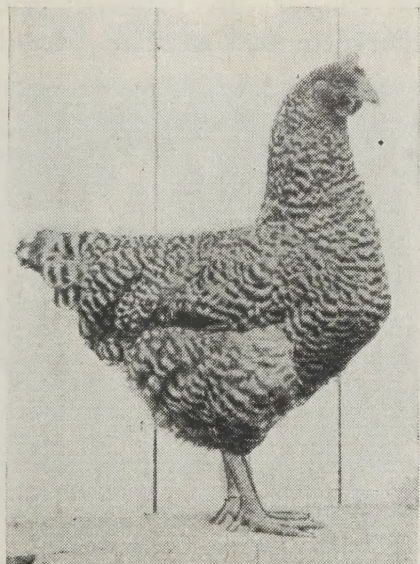
A high producer. Laid 268 eggs in first year. Possesses size and substance without coarseness.



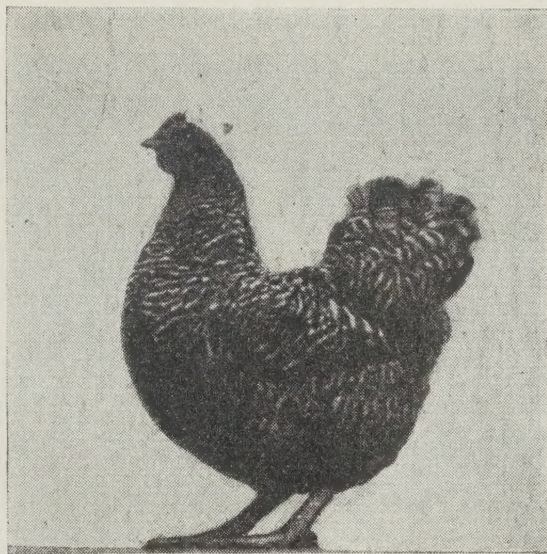
A low producing type. This bird has a short keel and a sagging abdomen filled with hard fat.

November 1 and February 27. Thirty-two pens laid less than one dozen eggs per bird. The comparative profits are significant.

With the price of a complete poultry ration estimated at two cents per pound of grain consumed and winter eggs selling at four cents each a flock must lay approximately a fifteen per cent production or fifteen eggs daily per one hundred birds, to pay for the feed only. A production in excess of this increases profits at the same rate as a lower production increases losses.



High producing type. Note horizontal back, sloping underline, good length of keel and full abdomen. Laid 227 eggs in first year.



A low producing type—very short body and round underline, also loose feathering.

Early Hatching

Early maturity is essential to high winter egg production. Very few pullets which do not lay before extremely cold weather commences will lay profitably before early spring. In order that pullets may be properly grown and ready to lay in early November they must be hatched sufficiently early to permit of a normal development. Late hatched pullets to lay by November 1 must be

forced and are not likely to continue at high production throughout the year. Assuming the average pullet of high-laying strains of the general purpose varieties such as Barred Plymouth Rocks as requiring six months to mature it would of necessity be hatched by May 1 to lay by November 1. April is therefore perhaps the most satisfactory month for hatching in Manitoba,



Poor laying type. Note long loose plumage. Head shows lack of vigour.

To hatch sufficient chicks in April by natural methods to replace half of the flock in the fall is a practical impossibility and can be met only by the adoption of artificial hatching and rearing. The sooner our farmers and other poultry raisers relinquish their faith in the uncertain and erratic broody hen,



Head of heavy layer. Note fine clean appearance and full bright eye.



Head of poor layer. Note wrinkled face and lack of life or expression in eye.

admit the facts at their face value and resort to artificial methods, the sooner, and only then, will they be in a position to avail themselves of the high egg prices prevailing in winter. Artificial hatching and rearing is extremely practical and requires much less labour than natural methods.

In view of the foregoing it seems not improbable that large co-operative chick hatcheries would perform an important function in the Manitoba poultry industry providing a reliable supply of eggs is available and the patrons of the hatcheries are equipped with modern rearing facilities for the early hatches.

THE MANITOBA APPROVED FLOCKS

To effect improvement in farm poultry in Manitoba, to assist in standardizing the poultry flocks and developing an unexcelled line of heavy laying stock the Manitoba Approved Flocks are established by the Poultry Division of the Live Stock Branch, Ottawa. From investigation among the farmers of the province it is quite evident that the Barred Plymouth Rock excels other varieties in general popularity, is in greatest demand, and meets the requirements most satisfactorily. Though no course of absolute specialization is decided upon it would appear that the province can be served most effectively by catering to its apparent wishes in this regard.

Functions of the Manitoba Approved Flocks

1. To provide the people of the province with a foundation stock of heavy laying strains, bred to the highest possible degree of production, upon which those wishing to improve the production of their flocks can rely.
2. To relieve the necessity in the near future of sending to other parts for large quantities of breeding stock, hatching eggs and chicks of uncertain or inferior breeding.
3. To insure a superior and reliable stock upon which an extensive co-operative chick hatching industry may be built.

The result of the work it is confidently expected will be a general improvement in the egg yield of farm poultry by virtue of which the morale of the business will be strengthened and the status reached which our domestic conditions warrant.



This is a photograph of the egg organs of the good bird
whose head is shown on page 8

Rules and Regulations — Manitoba Approved Flocks

Under the Manitoba Approved Flocks the breeder enters into agreement with the Live Stock Branch, Dominion Department of Agriculture, through its Manitoba Poultry Promoter, as follows:—

1. To place the details of the breeding of his or her flock under the direction of the Poultry Promoter for Manitoba.
2. To use for breeding purposes males which have been secured, approved or selected and them only.
3. To use for breeding purposes females which have been selected from the flock or otherwise approved and them only.
4. To not use for hatching purposes eggs laid by hens while running with unapproved males, nor until they have been separated continuously from such males for a period of *at least two weeks*.
5. To incubate only eggs which weigh *at least two ounces* each, are hard, firm and smooth in shell, of rich brown colour, good shape, free from wrinkles and other defects.
6. To hatch, by artificial means if necessary, as many of the chicks as possible in April and to have hatching complete if at all possible not later than May 20.
7. To use every precaution against approved birds becoming mixed with unapproved birds during the breeding season.
8. To allow the flock to be culled of poor layers or other undesirable birds at any time deemed advisable.
9. To provide at the end of each month, on forms provided, a statement of the daily egg production of the flock.
10. To adopt any reasonable measure suggested for improving the environmental conditions of housing, care and management.
11. To adopt necessary measures to keep the flock free of disease and especially tuberculosis.
12. To abide by the foregoing agreement for three years.

NOTE.—If the breeder can keep a feed account it will reveal a great deal of useful information and frequently serve in explaining low or unsatisfactory egg yield, etc.

In return for the faithful observance of the Rules and Regulations governing the Manitoba Approved Flocks, on the breeder's part, the Live Stock Branch, Dominion Department of Agriculture, through its Poultry Promoter for Manitoba or his assistants agrees to assist those participating in the work, as follows:—

1. To select a breeding pen of the highest producing females previous to the hatching season.
2. To select from the flock or procure elsewhere suitable and sufficient male birds to mate on the approved females.
3. To make sale for, if possible, any surplus of desirable breeding stock, hatching eggs, or day-old chicks.
4. To cull the flock, during the summer or autumn months, of its low and unprofitable producers.
5. To provide gratis all forms on which reports are to be made.
6. To render any other possible assistance to insure profitable production from the flock.

Record of Performance "A" for Poultry

The Record of Performance "A" for poultry is a medium through which breeders who are in a position to trap-nest their poultry under the supervision



Contrast in head type shot by the movie.

of the Live Stock Branch may obtain certificates of production for birds which lay a specified number of eggs and of a specified quality within fifty-two consecutive weeks of the day the first egg is laid. Pure-bred birds possessing no standard disqualifications which lay 150 eggs of the quality of "Specials" and the weight of "Extras" as defined in the Canadian standards for eggs, in the time mentioned, are eligible for a certificate of Record of Performance. A production of 225 eggs under the same conditions makes the bird eligible for a certificate of *Advanced* Record of Performance. This is but a brief statement of the principal points. A full outline of the work may be obtained on application.

It is the desire to enlist as large a number of flocks as possible in this work. To such an extent does a bird's egg production and pedigree determine her value that birds with authentic high records are and will continue to be at a premium. It is proposed to use the flocks in the Record of Performance "A" in so far as possible, as the nucleus for high-class stock to build up the Manitoba Approved Flocks. It is evident that flocks entered in the work of Record of Performance "A" must be trap-nested. This is not required of the Manitoba Approved Flocks.



Contrast in the ovaries of the birds on opposite side of page.

A. C. McCULLOCH,
Poultry Promoter for Manitoba,

304 Scott Block,
Winnipeg, Man.

